

FIGURE 1

DATA SET 1										DATA SET 2		
General Gene Marker Type	Examples of Gene Types	Gene Marker	Polymorphisms	Links with Cancer susceptibilities	Links with higher risks of cancer susceptibility	Homozygote or heterozygote relative to wild type	Genetic Susceptibility ranking				Foods and other materials to avoid	Dietary and lifestyle advice
							Reduces susceptibility	Normal susceptibility	Moderate increase in susceptibility	Higher susceptibility		
Type I	Genes that code for enzymes responsible for the detoxification of xenobiotics in Phase I metabolism	CYP						YES			Reduce consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Consume food products, such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables
			CYP1A1-A (Wild type)	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote					Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables
			CYP1A1-C	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote			YES	YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables
						Heterozygotes			YES		Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables
			Ile-Val polymorphism	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote				YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables
		NAT1				Heterozygotes			YES		Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables
											Reduce consumption of potential precarcinogens (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Consume food products, such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables
			NAT1*4 (wild type)			Homozygote		YES			Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Increase consumption of food products known to induce Phase II metabolism, e.g. increase consumption of fruit and vegetables, particularly cruciferous vegetables
				Colon cancer		Homozygote				YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish	Consume food products, such as for example vegetables and fruit, e.g. cruciferous and allium family such as garlic and onion

Figure 2

